



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/615,400	07/09/2003	Herbert Busse	7116-1	8469

7590 11/09/2004

SHLESINGER, ARKWRIGHT & GARVEY LLP
3000 South Eads Street
Arlington, VA 22202

EXAMINER

PATEL, VISHAL A

ART UNIT	PAPER NUMBER
----------	--------------

3676

DATE MAILED: 11/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/615,400

Applicant(s)BUSSE ET AL. **Examiner**

Vishal Patel

Art Unit

3676

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 22 September 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-33 is/are pending in the application.
- 4a) Of the above claim(s) 19,23,25-31 and 33 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-18,20,24 and 32 is/are rejected.
- 7) ☐ Claim(s) 21 and 22 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☒ Certified copies of the priority documents have been received in Application No. 09/786,869.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>7/9/03</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of specie I in the reply filed on 9/22/04 is acknowledged. The traversal is on the ground(s) that the group of invention are linked to form a single general inventive concept (requirement of unity of invention) when there is a technical relationship among those inventions involving one or more of the same or corresponding special technical features. This is not found persuasive because an independent claim does not avoid the prior art, so the question whether there is still an inventive link between all the claims dependent on that claim needs to be carefully considered. If there is no link remaining, an objection of lack of unity a posteriori (that is, arising only after assessment of the prior art) may be raised. Similar considerations apply in the case of a genus /species or combination /subcombination situation. Claims that are elected are 15-18, 20-23 and 32. Claims that are withdrawn are 19, 24-31 and 33. Furthermore claim 24 is withdrawn as reading upon non-elected species.

Applicants argument that specie I should include figure 4 is persuasive, so the specie I is figures 1 and 4. As applicant stated in the specification that figure 3 is state of the art not prior art, this is why this figure was in the restriction as a specie. As of now applicant has stated that figure 3 is prior art so that species is withdrawn.

The requirement is still deemed proper and is therefore made FINAL.

Drawings

2. Figure 3 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The

Art Unit: 3676

replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

3. The spacing of the lines of the specification is such as to make reading and entry of amendments difficult. New application papers with lines double spaced on good quality paper are required.

The following guidelines illustrate the preferred layout for the specification of a utility application. These guidelines are suggested for the applicant's use.

Arrangement of the Specification

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC (See 37 CFR 1.52(e)(5) and MPEP 608.05. Computer program listings (37 CFR 1.96(c)), "Sequence Listings" (37 CFR 1.821(c)), and tables having more than 50 pages of text are permitted to be submitted on compact discs.) or
REFERENCE TO A "MICROFICHE APPENDIX" (See MPEP § 608.05(a). "Microfiche Appendices" were accepted by the Office until March 1, 2001.)
- (e) BACKGROUND OF THE INVENTION.
 - (1) Field of the Invention.
 - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (f) BRIEF SUMMARY OF THE INVENTION.
- (g) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (h) DETAILED DESCRIPTION OF THE INVENTION.

Art Unit: 3676

- (i) CLAIM OR CLAIMS (commencing on a separate sheet).
- (j) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (k) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

4. The disclosure is objected to because of the following informalities: the specification mentions "claim 1" multiple times through out the specification, this should be replaced by what is claimed or deleted since claim 1 is canceled.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 15, 24 and 32 are rejected under 35 U.S.C. 102(b) as being anticipated by Richards (US. 4,976,444).

Regarding claim 15: Richards discloses a low friction seal assembly comprising a guide element (12) for guiding a shaft (intended use but 42 considered as a shaft), the guide element having a groove (groove holding seal ring 72) extending therein, the groove having a bottom wall (wall contacting 104) and a first side wall (side wall contacting a seal 106), a sealing ring received within the groove, the sealing ring having a cylindrical inner surface (cylindrical inner surface having grooves 96-98) adapted to be positioned adjacent a shaft surface to be sealed (intended use but the sealing ring is used to seal 42), an end face (face holding the seal 106) disposed adjacent the groove first side wall and an outer cylindrical surface (surface holding 104)

Art Unit: 3676

disposed adjacent the groove bottom wall, a seal (106) disposed between the sealing ring end face and the groove first side wall so that any pressure occurring between the groove bottom wall and the sealing ring outer cylindrical surface is maintained less than the pressure between the shaft and the guide element (pressure is restricted from flowing across the end face of the seal ring by the seal 106).

The seal has a width that is larger than a gap between the first side wall of the groove and the end face of the seal ring. The seal is charged with a pressure medium.

Regarding claim 24: The seal ring having a second side wall (wall 80) associated with the guide element groove, a drainage channel (as showed in figure 5 which includes all the limitations of claim 15) operatively associated with the second side wall and extending outwardly through the guide element from the second side wall (the drainage channel extends thorough the seal ring and the guide element).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 16-18 and 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Richards in view of Lindeboom (US. 3,743,304).

Richard discloses the invention substantially as claimed above but fails to disclose that the seal comprises a formed part and a plastic sealing ring. Lindeboom discloses a seal ring, the seal ring has a side wall (side wall having groove 54) having a groove (54) that holds a seal (seal

Art Unit: 3676

formed by 66 and 68), the seal comprising a formed part (64) made of plastic or rubber material and a plastic ring (66) and the seal is deformed by a pressure in a system having the seal ring. It would have been obvious to one having ordinary skill in the art at the time the invention was made to configure the seal of Richards to have a formed part and a plastic ring as taught by Lindeboom, to provide seals under high pressure and temperatures (column 3, lines 32-46 of Lindeboom).

Allowable Subject Matter

9. Claims 21-22 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Conclusion

10. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Reference cited in the IDS (DE 1804557) also discloses a seal similar to the seal of claim 15, Wahl, Baudry discloses a seal similar to a seal of the applicants seal, Maier and Kunderman.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vishal Patel whose telephone number is (703) 308-8495. The examiner can normally be reached on Monday through Friday from 7:30 PM to 4:00 PM (EST).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Judy Swann, can be reached on (703) 306-4115.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-2168. Technology Center 3600 Customer Service is available at 703-308-1113. General Customer Service numbers are at 800-786-9199 or 703-308-9000. Fax Customer Service is available at 703-872-9325.

Any response to this action should be mailed to:

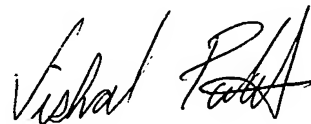
Art Unit: 3676

Commissioner of Patents and Trademarks
Washington, D.C. 20231

or faxed to: 703-872-9326, for formal communications for entry before Final action: or,
703-872-9327, for formal communications for entry after Final action.

Hand-delivered responses should be brought to Crystal Park Five, 2451 Crystal Drive,
Arlington, Virginia, Seventh Floor (Receptionist suite adjacent to the elevator lobby).

VP
November 5, 2004

A handwritten signature in black ink, appearing to read "Vishal Patel". The signature is fluid and cursive, with the first name "Vishal" and last name "Patel" clearly distinguishable.

Vishal Patel
Patent Examiner
Tech. Center 3600